CMPRO-4H2H

4 by 2 HDMI Matrix

Operation Manual

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SAFETY PRECAUTIONS

Please read all instructions before attempting to unpack, install or operate this equipment and before connecting the power supply.

Please keep the following in mind as you unpack and install this equipment:

- Always follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
- To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
- Never spill liquid of any kind on or into this product.
- Never push an object of any kind into this product through any openings or empty slots in the unit, as you may damage parts inside the unit.
- Do not attach the power supply cabling to building surfaces.
- Use only the supplied power supply unit (PSU). Do not use the PSU if it is damaged.
- Do not allow anything to rest on the power cabling or allow any weight to be placed upon it or any person walk on it.
- To protect the unit from overheating, do not block any vents or openings in the unit housing that provide ventilation and allow for sufficient space for air to circulate around the unit.

REVISION HISTORY

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGE
RDV1	03/09/12	Preliminary Release
RDV2	30/01/13	Add 4K x 2K HDMI cable spec.
RDV3	04/06/13	Separate 4H4H & 4H2H

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1. INTRODUCTION

The 4 by 4/4 by 2 HDMI matrix with 4kx2k supported which allows HDMI signal from any of its four sources to be routed to and displayed on any of its four/two connected HDMI displays simultaneously. It supports 3D, 3Gbps bandwidth, 16-bit Deep Color, Hi-Def lossless audio and other features defined by HDMI specifications. The management of source/ sink scenarios can be operated easily through on-panel buttons, IR remote control, RS-232 or Web GUI controls.

2. APPLICATIONS

- Showroom display control
- Educational demo
- Installation usage
- Advertising display

3. PACKAGE CONTENTS

- 4x2 HDMI Matrix
- Remote Control (CR-33)
- Power Adaptor
- Operational Manual

4. SYSTEM REQUIREMENTS

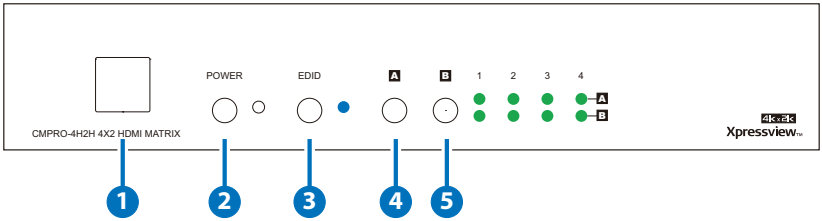
Input source equipment such as Blu-ray/DVD players with 3D/4kx2k contents, output display HD TV/monitor with 3D/4kx2k functions and HDMI high standard cables.

5. FEATURES

- Support HDTV resolutions up to 4Kx2K
- Supports 7.1CH of LPCM, Dolby TrueHD, and DTS-HD Master Audio
- Supports Deep Color up to 1080p 48-bit
- Supports Internal/External EDID
- Supports IR, RS-232 and Ethernet controls

6. OPERATION CONTROLS AND FUNCTIONS

6.1 Front Panel



1 IR

IR receiver window accepts the remote control signal of this device.

2 POWER & LED

Press this button to power the device on/off. The LED will illuminate when the power is on.

3 EDID & LED

Press this button to use the internal/STD or external/TV EDID. The LED will illuminate when STD EDID is selected. STD EDID video up to 1080p@24/50/60 and audio up to LPCM 2CH at 192kHz & 36bit.

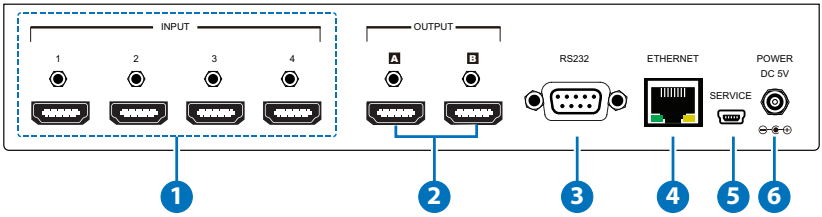
4 OUTPUT A

Press this button to select input source for output A, the LED will illuminate accordingly to the selection.

5 OUTPUT B

Press this button to select input source for output B, the LED will illuminate accordingly to the selection.

6.2 Rear Panel



1 INPUT 1~4

Connect input source equipments such as DVD/Blu-ray players with HDMI cables.

2 OUTPUT A/B

Connect to HDMI 3D TV/display or monitor for both audio and video or moving/static graphic play.

3 RS-232

Connect to a PC or laptop with D-Sub 9-pin male cable for the transmission of RS-232 commands.

4 ETHERNET

Connect to an internet or network activate device. The yellow LED will illuminate up on connection and the green LED will blink during data transmission.

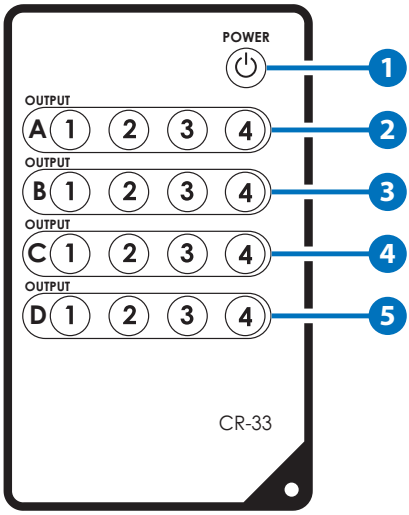
5 SERVICE

Reserved for factory using only.

6 POWER DC 5V

Connect the 5V DC power supply included in the package to an AC wall outlet.

6.3 Remote Control



1 POWER

Press this button to switch on or set to standby mode of the device.

2 OUTPUT A 1~4

Press buttons 1~4 to selection the nominated input for output A.

3 OUTPUT B 1~4

Press buttons 1~4 to selection the nominated input for output B.

6.4 D-Sub 9 Pin Definitions

CMPRO-4H2H			Remote Control	
PIN	Assignment		PIN	Assignment
1	NC		1	NC
2	TX		2	RX
3	RX	→	3	TX
4	NC		4	NC
5	GND	←	5	GND
6	NC		6	NC
7	NC		7	NC
8	NC		8	NC
9	NC		9	NC

Baud Rate: 19200bps
Data Bit: 8 bits
Parity: None
Flow Control: None
Stop Bit: 1

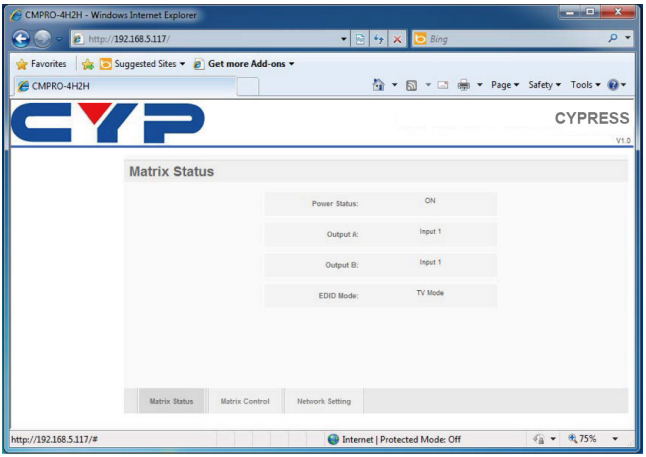
6.5 RS-232 Protocols

Command	Description
A1~A4	Switch Output A to 1~4
B1~B4	Switch Output B to 1~4
C1~C4	Switch Output C to 1~4
D1~D4	Switch Output D to 1~4
ABC...1~ABC...4	Switch Output A B C... to 1~4 at the same time
SETIP<IP> <SubNet> <GW>	Setting IP. SubNet. GateWay <SataicIP>
RSTIP	IP configuration was reset to factory default<DHCP>
IPCONFIG	Display the current IP config
P0	Power Off
P1	Power On
I1~I4	Switch all the output to 1~4
ST	Display the current matrix state and F/W version
RS	System Reset to A1, B2, C3, D4
EM	Setting EDID MODE. 1-STD 2-TV
?	Display all available commands

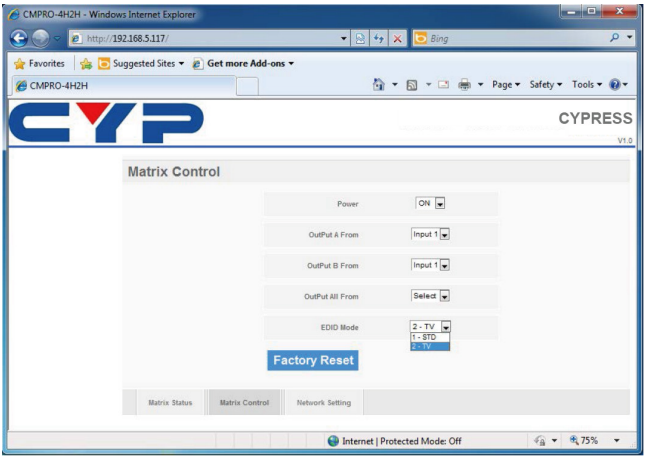
Note: *All the RS-232 command will be not executed unless followed with a carriage return and all command are case-insensitive.*

6.6 Web GUI Control

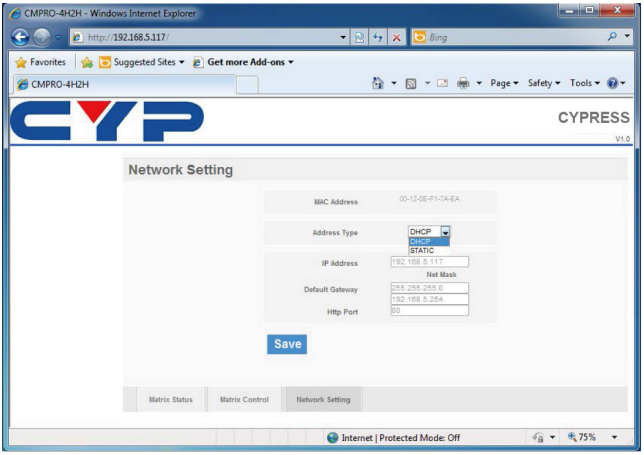
On a PC/Laptop that is connected to the same active network as the Matrix, open a web browser and type device's IP address(get from RS-232's help command or use the default IP: 192.168.0.1) on the web address entry bar. The browser will display the device's status, control and User setting pages.



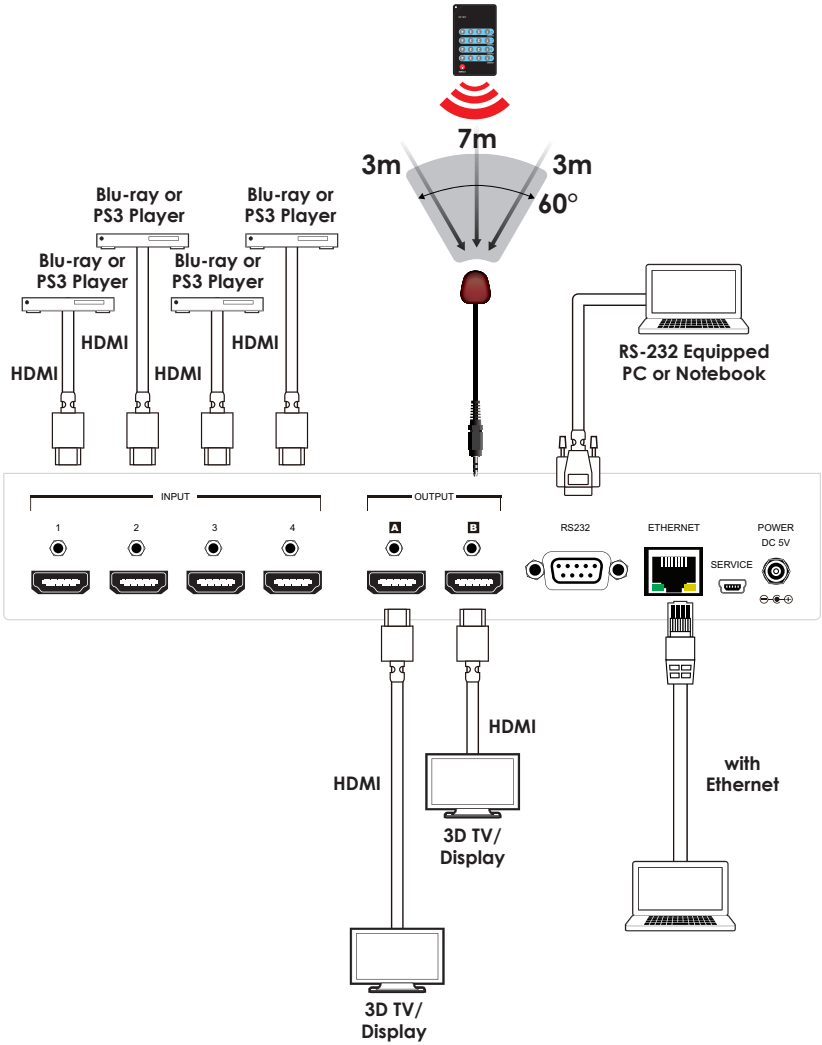
Click on the 'Control' tab to control power, input/output ports, EDID and reset mode.



Clicking on the 'Setting' tab allows you to reset the IP confi guration. The system will ask for a reboot of the device every time any of the settings are changed. The IP address needed to access the Web GUI control will also need to be changed accordingly on the web address entry bar.



7. CONNECTION DIAGRAM



8. SPECIFICATIONS

Video Bandwidth	300Mbps /10.2Gbps
Input ports	4 x Female HDMI type A, 1 x IR In, 1 x RS-232, 1 x RJ-45, 1 x Mini USB (for service only)
Output port	4 x Female HDMI type A
Output Resolution	480i ~1080p, 4Kx2K
Power Supply	5V/1A DC (US/EU standards, CE/FCC/UL certified)
ESD Protection	Human body model: ±8kV (air-gap discharge) ±4kV (contact discharge)
Dimensions	240 mm(W) x 112 mm(D) x 84 mm(H)/
Weight	768 g
Chassis Material	Metal
Silkscreen Color	Black
Operating Temperature	0˚C ~ 40˚C / 32 ˚F ~ 104 ˚F
Storage Temperature	-20˚C ~ 60˚C / -4 ˚F ~ 140 ˚F
Relative Humidity	20 ~ 90% RH (non-condensing)
Power Consumption	3w

Note: *When displaying a 3D signal with a higher bandwidth than 225 MHz or a 4K×2K resolution source, a High Speed HDMI cable is required.*

9. ACRONYMS

ACRONYM	COMPLETE TERM
HDCP	High-bandwidth Digital Content Protection
HDMI	High-Definition Multimedia Interface

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